| Index of Cla | ims |
|--------------|-----|
|              |     |

| _ | Application No.   | Applicant(s)    |
|---|-------------------|-----------------|
|   | 10/791,890        | KATSUMATA ET AL |
|   | Examiner          | Art Unit        |
|   | Alandra Ellington | 2855            |

| √ | Rejected | 1 |
|---|----------|---|
| = | Allowed  | ÷ |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| ÷ | Restricted                     |

| N | Non-Elected  | A |
|---|--------------|---|
| ı | Interference | o |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla   | im       | Date   |                  |          |          |             |                 |          |                 | Date Claim |     |       |          |  |          |           |           |          | ate Claim Date |          |          |          |       |          |          |                 |          |          |           |          |           | $\neg$    |          |
|-------|----------|--|------------------|----------|----------|-------------|-----------------|----------|-----------------|------------|-----|-------|----------|--|----------|-----------|-----------|----------|----------------|----------|----------|----------|-------|----------|----------|-----------------|----------|----------|-----------|----------|-----------|-----------|----------|
|       |          | <del>                                     </del> |                  | Т        | Ť        | T           | 1               | Ī        | T               | $\dashv$   | 十   | - 5,6 |          | $\vdash$   | _        | Т         | Ť         | Ť        | $\neg$         | Т        | Т        | -        |       |          | $\neg$   | Т               | П        | Ť        | Ť         |          | $\neg$    | $\neg$    | ᅱ        |
| Final | Original | 10/29/04   |                  |          |          |             |                 |          |                 |            |     | Final | Original |  |          |           |           |          |                |          |          |          | Final | Original |          |                 |          |          |           |          |           |           |          |
| 1     | 1        | =  |                  | +        | 7        | $\dashv$    |                 | $\dashv$ | $\dashv$        | ┥          | -   |       | 51       | -  | _        | $\dashv$  | $\dashv$  | _        | $\dashv$       | $\dashv$ | $\dashv$ | _        |       | 101      | $\dashv$ | 十               | $\dashv$ | $\dashv$ | $\dashv$  |          | $\dashv$  | $\dashv$  |          |
| 2     | 2        | =  | $\Box$           | 十        | T        | 一           | $\dashv$        | $\neg$   | _               | ┪          | j   |       | 52       |  | _        | _         | 寸         | 7        | $\dashv$       | _        |          | ┪.       |       | 102      | T        |                 | 1        | $\dashv$ | _         | ヿ        | ヿ         | $\dashv$  | ヿ        |
| 3     | 3        | =  |                  | _        | 寸        | 寸           | $\neg$          | 寸        | $\neg$          | ┥.         | r   |       | 53       | П  |          | $\neg$    |           | 寸        | _              |          |          |          |       | 103      | $\neg$   | ┪               | 寸        | ヿ        | $\exists$ | ヿ        | ヿ         | $\exists$ |          |
| 4     | 4        | =  | $\Box$           | 十        |          | $\neg$      |                 |          | T               | ┪          | T   |       | 54       | П  |          | 寸         | $\neg$    | 寸        | $\dashv$       | $\dashv$ | T        | 7        |       | 104      | $\dashv$ | 7               | 寸        | ヿ        | $\neg$    | $\neg$   | 寸         | ヿ         |          |
|       | 5        | Г  |                  | 1        | $\neg$   |             | $\neg$          | T        |                 | ┪          |     |       | 55       |  | $\neg$   | $\exists$ | $\neg$    | _        | $\dashv$       | $\dashv$ | 7        |          |       | 105      | $\neg$   | $\top$          | 寸        | $\neg$   | $\neg$    | $\neg$   | $\exists$ | $\exists$ |          |
|       | 6        |  | H                | 寸        | 寸        | 寸           | _               | _        | $\dashv$        | ┪          |     |       | 56       |  |          |           | 1         | T        | $\dashv$       | 寸        |          |          |       | 106      | $\neg$   | 十               | ヿ        | ヿ        |           | $\dashv$ | ヿ         | ヿ         |          |
|       | 7        |  | $\Box$           | T        |          | $\neg$      | 寸               |          | 寸               | ╗          |     |       | 57       |  |          |           |           | _        | $\dashv$       | 寸        |          |          |       | 107      |          | ┪               | 一        | $\neg$   | $\neg$    |          | ヿ         | $\neg$    | ヿ        |
|       | 8        | _  | $\Box$           |          |          |             | 1               | 1        | T               | 7          | r   |       | 58       |  | $\neg$   | 寸         |           |          | 7              | 寸        |          | _        |       | 108      |          | 7               | $\neg$   |          | ᄀ         | ╗        | $\neg$    | ヿ         | П        |
|       | 9        |  | $\Box$           | T        | T        |             | T               | $\neg$   |                 | ٦.         |     |       | 59       |  |          | $\neg$    | 寸         | $\neg$   | 寸              | $\dashv$ | T        |          |       | 109      |          | _               |          |          |           |          | ヿ         | ヿ         |          |
|       | 10       | $\vdash$   |                  | _        | T        |             | 一               | 一        | 一十              | ٦,         |     | -     | 60       |  |          | $\neg$    | ヿ         | $\neg$   | $\neg$         | 寸        | 7        |          |       | 110      |          | $\top$          |          |          |           | $\neg$   | $\neg$    | ヿ         |          |
|       | 11       | _  |                  |          | <b>-</b> | $\neg$      | $\neg$          | $\neg$   |                 | ┨          |     |       | 61       |  |          | $\neg$    |           | $\neg$   | 寸              | ┪        | _        |          |       | 111      |          | 十               | 寸        | T        |           | ╗        | ヿ         | $\neg$    | _        |
|       | 12       | Г  | $\Box$           | 十        | 1        |             | $\neg$          | $\dashv$ | $\dashv$        | ٦.         | ·   |       | 62       | П  |          |           |           | 1        |                | 1        | 7        | 7        |       | 112      | $\Box$   | $\neg \uparrow$ | $\dashv$ | _        | $\neg$    |          | $\dashv$  | $\dashv$  | $\dashv$ |
|       | 13       |  | $\Box$           | 1        | 1        | İ           |                 |          | 寸               | 7          |     |       | 63       | П  | $\neg$   |           | $\neg$    |          | 寸              | ┪        | 寸        | _        |       | 113      |          | $\dashv$        | $\dashv$ |          |           |          | $\dashv$  | $\dashv$  | П        |
|       | 14       |  | $\sqcap$         | $\dashv$ | 1        | T           | $\neg$          | $\neg$   | $\dashv$        | $\exists$  |     |       | 64       | П  |          | $\neg$    |           | T        | 寸              | ╅        | 寸        |          |       | 114      |          | $\neg$          | $\dashv$ |          |           |          | $\dashv$  | $\dashv$  | $\neg$   |
|       | 15       |  | $\sqcap$         | $\dashv$ | $\dashv$ | $\neg$      | $\neg$          | $\neg$   | $\dashv$        | 7          |     |       | 65       | П  |          |           | _         |          | _              | ヿ        | 丁        | 7        |       | 115      | $\Box$   | $\dashv$        | $\dashv$ | $\neg$   | 一         |          | $\neg$    | $\neg$    | $\neg$   |
|       | 16       |  |                  | $\neg$   | $\neg$   |             | $\neg$          | _        | $\neg$          | ┑          | ı   |       | 66       |  |          |           | $\neg$    |          |                |          | T        | 7.       |       | 116      | T        | $\top$          |          | 一        |           | $\neg$   | $\neg$    | $\neg$    |          |
|       | 17       |  | Ħ                | 寸        |          | 乛           | $\neg$          | $\neg$   | 一               | ヿ          | .   |       | 67       |  |          | T         | 寸         |          | 一              | $\neg$   | ヿ        | ヿ        |       | 117      |          | T               |          | 一        |           | ヿ        | $\neg$    | $\neg$    |          |
|       | 18       |  |                  | ヿ        | ヿ        | 寸           |                 |          |                 |            |     |       | 68       |  |          |           | コ         | 1        |                | 寸        | T        | 7        |       | 118      |          | $\top$          |          |          |           |          | $\Box$    | $\neg$    |          |
|       | 19       |  | T                | 十        | 一        | 一           | T               |          | 一               | _          | ۲   |       | 69       |  |          |           | $\exists$ | 1        |                | 寸        | 1        | ٦        |       | 119      |          | T               | T        |          | . ,       |          |           |           | $\neg$   |
|       | 20       |  | 1. 1             | 寸        |          |             |                 |          | T               | 7          |     |       | 70       |  |          |           | ヿ         |          | $\neg$         | 寸        | $\top$   | ┑        |       | 120      |          | T               | T        |          |           | ヿ        | $\neg$    |           |          |
|       | 21       |  |                  | 寸        | ┪        | ヿ           |                 |          |                 |            |     |       | 71       | $\vdash$   | $\neg$   | ヿ         | 一         |          |                | $\neg$   | 1        | $\neg$   |       | 121      |          |                 |          | T        |           |          | ヿ         | ヿ         |          |
|       | 22       |  |                  | _        | _        |             |                 | $\neg$   |                 | _          |     |       | 72       | _  |          | ヿ         | 一         | 1        | T              | T        | 1        | ┨        |       | 122      |          | 1               | T        | T        |           |          | ヿ         | $\neg$    |          |
|       | 23       | $\vdash$   |                  | _        | 一        | $\neg$      |                 |          | $\neg \dagger$  |            | *   |       | 73       |  |          | 寸         | $\neg$    | 寸        | コ              | 7        | 1        | $\neg$   |       | 123      |          |                 | ╛        |          |           | 寸        | ヿ         | $\neg$    |          |
|       | 24       |  |                  |          | $\neg$   | 一           | $\neg \uparrow$ |          | $\dashv$        | ٦.         | r   | -     | 74       |  |          | 寸         | $\neg$    | ヿ        | _              | 寸        | $\neg$   | ヿ        |       | 124      |          | T               | ╗        |          |           |          | $\dashv$  | $\exists$ |          |
|       | 25       | T  | Ħ                | $\neg$   | _        | $\neg \neg$ | _               | $\neg$   | 一               | $\neg$     | T   |       | 75       |  |          |           | $\neg$    |          |                |          | T        | ╗        |       | 125      | $\Box$   |                 | $\neg$   |          |           | T        | ヿ         | ヿ         |          |
|       | 26       |  | $\Box$           |          | 寸        |             |                 |          | 7               |            | Ť   |       | 76       |  |          |           |           | ╗        | 寸              | T        | 一        |          |       | 126      |          | $\exists$       | $\neg$   |          |           |          | $\neg$    | ヿ         |          |
|       | 27       |  | Ħ                | $\neg$   |          | $\neg$      |                 |          | $\neg$          | $\neg$     | 一   |       | 77       |  |          |           | $\neg$    |          |                |          | T        |          |       | 127      | $\Box$   |                 | $\neg$   |          |           | T        | $\neg$    | $\exists$ |          |
|       | 28       | T  | П                | 7        | $\neg$   |             |                 |          | 寸               | $\neg$     | ı   |       | 78       |  |          |           |           | $\neg$   |                |          | 寸        |          |       | 128      |          | 7               |          | $\neg$   |           | $\neg$   | $\neg$    | $\exists$ |          |
|       | 29       |  | Ħ                |          |          | $\dashv$    | $\neg$          |          | $\neg$          | ٦          | _   |       | 79       | Г  |          | $\neg$    |           | $\neg$   |                |          |          |          |       | 129      |          | $\neg$          | $\neg$   |          |           |          | T         |           |          |
|       | 30       |  | H                | 1        | T        |             | $\dashv$        | T        |                 | ヿ          |     |       | 80       | Г  |          | $\neg$    | 一         | ヿ        | 寸              | ヿ        | 寸        | _        |       | 130      |          | $\neg$          | $\neg$   | $\neg$   |           | 寸        | ヿ         | ヿ         |          |
|       | 31       | T  | П                | 1        | T        |             |                 | $\neg$   |                 | ヿ          | ı   |       | 81       |  |          | $\exists$ |           | $\neg$   |                | $\neg$   | _        |          |       | 131      |          |                 | 一        |          |           |          | ヿ         | $\Box$    |          |
|       | 32       | Г  |                  | _        |          |             | $\neg$          |          | _               | ٦          | ı   |       | 82       |  |          |           | $\neg$    | 一        | $\neg$         | 寸        | 寸        | $\neg$   |       | 132      |          | T               |          | コ        |           |          | $\neg$    | T         |          |
|       | 33       |  |                  | _        |          |             |                 |          |                 | ᆌ          | İ   |       | 83       |  |          |           |           | $\neg$   | ヿ              | T        | $\neg$   | $\neg$   |       | 133      |          |                 | 一        |          |           |          | $\neg$    | $\neg$    |          |
|       | 34       | T  | $\sqcap$         | 寸        | ┪        |             | $\neg$          | $\neg$   | $\dashv$        | ٦.         |     |       | 84       | Т  | П        | $\dashv$  |           |          | _              | 寸        | 1        | $\dashv$ |       | 134      |          | $\neg$          | 1        |          |           |          | $\neg$    | $\neg$    | _        |
|       | 35       | 1  |                  | $\neg$   | _        |             |                 |          | $\dashv$        | $\neg$     | Ī   |       | 85       |  |          |           |           |          | 7              | 寸        |          | $\neg$   |       | 135      |          | $\neg$          | 7        | $\neg$   |           |          | ヿ         | $\neg$    | _        |
|       | 36       | T  |                  | 寸        | 寸        |             |                 |          | $\exists$       | $\neg$     | 1   |       | 86       |  |          |           |           | T        | _              | _        |          | ╗        |       | 136      | П        | $\top$          | 7        |          |           | $\neg$   | $\neg$    | $\neg$    |          |
|       | 37       | T  |                  | 寸        | 一        | $\neg$      |                 | $\neg$   | $\neg \uparrow$ | $\neg$     |     |       | 87       | П  |          |           |           | 寸        | 7              | 1        | $\dashv$ |          |       | 137      | П        | $\top$          | 1        |          |           | $\neg$   | $\neg$    | $\dashv$  |          |
|       | 38       | T  | $\sqcap$         | 7        | $\dashv$ | 一           | $\dashv$        | _        | $\dashv$        | $\neg$     | r   |       | 88       |  |          |           |           | T        |                |          | _        | $\neg$   |       | 138      | $\sqcap$ | $\dashv$        | ╗        | $\neg$   |           |          | ヿ         | $\neg$    | _        |
|       | 39       |  | $\sqcap$         |          | 一        | 一           | $\Box$          | $\vdash$ | $\neg$          | $\neg$     | r   |       | 89       |  |          |           |           |          |                |          | $\neg$   | $\neg$   |       | 139      | $\sqcap$ | $\neg$          | ┪        | $\neg$   |           |          | $\neg$    | $\neg$    | _        |
|       | 40       |  | $\sqcap$         | 寸        | 寸        |             |                 |          | $\Box$          | ヿ          | ı   |       | 90       |  |          |           |           |          | 7              | _        | 寸        | $\neg$   |       | 140      | П        |                 | ╗        | 一        |           |          | $\neg$    | ヿ         |          |
|       | 41       |  |                  | $\dashv$ | $\neg$   |             |                 | $\Box$   |                 | 按 1        | r   |       | 91       | $\vdash$   |          |           | 一         |          |                | 7        | 十        |          |       | 141      |          | $\top$          | T        |          | $\neg$    |          | $\neg$    | $\neg$    |          |
|       | 42       | 1  |                  | 寸        | $\dashv$ | $\neg$      |                 | $\Box$   | $\dashv$        | 7          | ı   |       | 92       | 1  |          |           |           |          | ╗              | 寸        | 寸        | $\neg$   |       | 142      | $\Box$   | $\top$          | 寸        |          | $\neg$    |          | $\neg$    | $\neg$    |          |
|       | 43       |  | $\Box$           | 寸        |          |             |                 |          | -               | $\dashv$   | - 1 |       | 93       | T  | П        | $\Box$    | $\neg$    |          |                | $\dashv$ | $\dashv$ | $\neg$   |       | 143      | $\Box$   | $\top$          | ╗        |          |           |          | 寸         | ╗         | _        |
|       | 44       | T  | $\sqcap$         | $\dashv$ | $\neg$   | $\neg$      | $\Box$          | $\Box$   | $\dashv$        | $\neg$     | l   |       | 94       | 1  | М        |           |           | $\neg$   | 寸              |          | _        | $\neg$   |       | 144      | П        | 1               | T        |          |           |          | $\neg$    |           |          |
|       | 45       | $t^-$  | $\vdash$         | $\dashv$ | $\dashv$ | $\dashv$    | $\vdash$        | $\vdash$ |                 | $\dashv$   | h   |       | 95       | †  | $\vdash$ | Н         | $\neg$    | $\dashv$ | 一              | $\dashv$ |          | $\dashv$ |       | 145      | $\vdash$ | $\dashv$        | ┪        |          |           | $\neg$   | $\dashv$  | $\dashv$  | _        |
|       | 46       | †  |                  | -        | $\dashv$ |             |                 | $\vdash$ | $\dashv$        | $\dashv$   | l   |       | 96       | T  | $\vdash$ |           | -         |          |                | $\dashv$ | $\dashv$ | $\dashv$ |       | 146      | H        | 十               | +        | $\neg$   |           |          | $\dashv$  | $\dashv$  | _        |
|       | 47       | $\vdash$   | $\vdash$         | $\dashv$ |          | Н           | $\vdash$        | Н        | $\dashv$        | $\dashv$   | ŀ   |       | 97       | $t^-$  | $\vdash$ | Н         | $\neg$    |          | _              | -1       | $\dashv$ | $\dashv$ |       | 147      | $\Box$   | 寸               | $\dashv$ | ㅓ        |           |          | $\dashv$  | $\dashv$  | _        |
|       | 48       | $t^{-}$  | 1                | $\dashv$ | $\neg$   | $\vdash$    | Н               | Н        | $\dashv$        | $\dashv$   | ŀ   |       | 98       | <del>                                     </del> |          | Н         | ᅥ         | - 1      |                | -        | 十        | $\dashv$ |       | 148      | $\vdash$ | 寸               | ┪        | $\neg$   |           | М        | $\dashv$  | $\dashv$  | _        |
|       | 49       | †  | +                | +        | $\dashv$ |             | Н               |          | $\dashv$        | $\dashv$   | ŀ   |       | 99       | $\vdash$   | Н        | Н         |           |          |                |          | 十        | $\dashv$ |       | 149      | Н        | 十               | -        | _        |           |          | 一         | $\dashv$  | _        |
|       | 50       | $t^-$  | $\dagger$        | $\dashv$ | _        | $\vdash$    | $\vdash$        |          | $\dashv$        | ᅥ          | ŀ   |       | 100      | T  | $\vdash$ | H         | $\neg$    |          | 一              |          | $\dashv$ | $\dashv$ |       | 150      | $\vdash$ | 7               |          |          | _         | $\vdash$ | $\dashv$  | $\dashv$  |          |
|       |          | ь-   | <del>1 - L</del> |          |          |             |                 | نـــا    |                 |            | L   |       |          | Ц  | Щ.       | لـــا     |           |          |                |          |          |          |       | 1 .00    |          |                 |          |          | _         |          |           |           |          |